

yumeng ma

HUMAN-AI INTERACTION · ACCESSIBILITY · VISUAL & SOCIAL COMPUTING

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Education

University of Washington

Seattle, WA

INCOMING PHD IN COMPUTER SCIENCE AND ENGINEERING

Brown University

Providence, RI

SC.M IN COMPUTER SCIENCE (HUMAN-COMPUTER INTERACTION)

2022 - 2024

GPA: 4.0 / 4.0

Coursework: UI/UX, Designing Humanity Centered Technology, HCI Seminar, Collaborative Robotics, Computer Graphics

Arizona State University

Tempe, AZ

B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY

2019 - 2022

Barrett Honors College

GPA: 4.0 / 4.0 Summa Cum Laude

Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Publications

* *equal contribution*

CONFERENCE PROCEEDINGS

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. 2023. "Together but not together": Evaluating Typing Indicators for Interaction-Rich Communication. In Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI '23). *Paper*

Ian Gonsler, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. 2023. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. Human Interaction and Emerging Technologies (IHET-AI 2023): Artificial Intelligence and Future Applications. *Paper*

SHORT PAPERS & EXTENDED ABSTRACTS

Yumeng Ma* and Jiahao Ren*. 2023. ProactiveAgent: Personalized Context-Aware Reminder System. In The 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23 Adjunct). *Paper*

Experience

Brown Department of Neuroscience

Providence, RI

COMPUTER VISION RESEARCH ASSISTANT

2023 - 2024

- Built a visual prosthesis system for blind and low vision users to locate everyday objects and identify surrounding text.

Brown + NASA

Providence, RI

MOBILE DEVELOPER RESEARCH ASSISTANT

2023 - 2024

- Developed and led the final integration of a sound and haptic enabled visualization cross-platform mobile app to encourage blind and low vision individuals to explore and learn about space.

Civillience

Remote

PRODUCT MANAGER & UI/UX DESIGNER INTERN | LIAISON BETWEEN FRONTEND AND UIUX

2023

- Led the UI/UX team to design a web-based app with interactive health data visualizations and create reusable components for the design system to maintain consistency throughout the product.

Brown Department of Engineering*Providence, RI***DESIGN RESEARCH ASSISTANT***2022 - 2023*

- Introduced a new paradigm for the integration of AR into laptop and desktop displays to enable local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

UCLA HCI Lab*Los Angeles, CA***HCI RESEARCH INTERN***2023*

- Led the development of a proactive reminder system that takes in user context, history, and spoken interactions by leveraging LLMs and personal agents.

Brown HCI Lab*Providence, RI***DISTRIBUTED RESEARCH EXPERIENCES FOR UNDERGRADUATES INTERN***2022*

- Designed novel typing indicators and found that they enhance user co-presence in written communication through in depth surveys and interviews.

ASU SoLET Lab*Tempe, AZ***PSYCHOLOGY RESEARCH ASSISTANT***2022*

- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission*Tempe, AZ***COLLABORATOR***2021-2022*

- Developed a web app that allows users to interact with the Psyche Spacecraft model and led user studies with biometric data analysis that showed the app increased public engagement.

Awards, Fellowships, & Grants

- 2024 **NSF Graduate Research Fellowship**, NSF
- 2024 **Paul G. Allen School Diamond Fellowship**, University of Washington
- 2023 **Tapia Celebration of Diversity in Computing Conference Scholarship**, Brown University
- 2019 - 2023 **Microsoft DisAbility Scholarship**, Microsoft
- 2022 **Google CS Research Mentorship Program Fellowship**, Google
- 2022 **Virtual Grace Hopper Celebration Scholarship**, AccessComputing

Teaching

- Spring '22 **Information Assurance**, TA for Adam Doupe and Tiffany Bao, ASU

Extracurricular & Work Activities

- 2021 - Present **Member**, AccessComputing
- 2022 - 2024 **Master's Representative**, Brown University CS Diversity Committee *Providence, RI*
- 2023 **Student Volunteer**, UIST *San Francisco, CA*
- 2020 - 2021 **Microsoft Support / Xbox Advocate Contract**, Microsoft *Tempe, AZ*

Skills

- Programming** Python, C/C++, C#, Java, Unix/Linux, ROS, APIs, Git
- Web/Mobile** HTML, CSS, Javascript, Typescript, React, React Native, Vue
- Game Dev** Unity, OpenGL
- Data** Jupyter Notebook, MySQL, MATLAB, JSON
- Design** UI/UX, Adobe Creative Suite, Figma, Wireframing, Fusion360, Blender